

First confirmed breeding record of Black-naped Tern *Sterna sumatrana* from St François Atoll and a new population estimate for Seychelles and the Afrotropical region

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Première nidification confirmée de la Sterne diamant *Sterna sumatrana* sur l'Atoll St François et une nouvelle estimation de la population pour les Seychelles et la région Afrotropicale. La Sterne diamant *Sterna sumatrana* niche du Pacifique occidental à l'Océan indien occidental. Les Seychelles abritent la seule population nicheuse connue de la région Afrotropicale, bien que certaines observations suggèrent qu'un petit nombre pourrait nicher ailleurs dans la région. Des cas anecdotiques de nidification depuis les années 1950 de l'Atoll St François, 400 km au sud de Mahé, et la présence de l'espèce toute l'année dans le groupe Alphonse semblaient indiquer que l'atoll pourrait abriter une colonie. Ceci a maintenant été confirmé et la population nicheuse a été estimée à 10–15 couples. Des recensements par la Fondation pour la Conservation des Îles ont par ailleurs fournis de nouvelles informations concernant la taille de la population seychelloise, qui est maintenant estimée à au moins 125–205 couples sur six sites (Aldabra, Cosmoledo, Farquhar, St Joseph, St François et African Banks); la nidification est suspectée sur deux autres (Astove et Bancs Providence). La population régionale ne compte probablement pas plus de 150–250 couples. St François répond aux critères pour être considéré comme Zone d'Importance pour la Conservation de la Sterne diamant (pour laquelle le seuil actuel est de seulement deux individus) ainsi que pour trois espèces d'oiseaux d'eau grégaires, le Drome ardeole *Dromas ardeola*, le Tournepierré à collier *Arenaria interpres* et la Sterne de Saunders *Sterna saundersi*.

Summary. Seychelles hosts the only known breeding population of Black-naped Tern *Sterna sumatrana* in the Afrotropical region. Anecdotal reports of breeding since the 1950s from St François Atoll, 400 km south of Mahé, and the year-round presence of the species in the Alphonse group suggested the atoll might host a breeding colony. This has now been confirmed with a population estimated at 10–15 pairs. Other surveys have revealed new information on the size of the Seychelles population, which is now estimated at a minimum of 125–205 pairs at six sites, with breeding suspected at two others. St François qualifies for consideration as an Important Bird Area for Black-naped Tern, as well as for three species of congregatory waterbirds, Crab-plover *Dromas ardeola*, Ruddy Turnstone *Arenaria interpres* and Saunders's Tern *Sterna saundersi*.

Black-naped Tern *Sterna sumatrana* breeds from the western Pacific to the western Indian Ocean, where it is represented by the race *mathewsi* (Gochfeld & Burger 1996). Seychelles lies at the western extremity of the species' range and holds almost the entire African regional population. As a result, the BirdLife International threshold for the species to qualify a site for consideration as an Important Bird Area (IBA) within the African region is currently just two birds (Fishpool & Evans 2001). In Seychelles, the species is currently known to breed on Aldabra, African Banks, St Joseph Atoll, Cosmoledo and Farquhar (Rocamora & Skerrett 2001, Skerrett *et*

al. 2001, Skerrett 2006). The species may also breed at Bancs Providence from where there are historical accounts (summarised in Diamond & Prÿs-Jones 1986: 542) but no recent observations except that territorial behaviour was reported in 1996 (Skerrett 1996). Astove has been named as a breeding site without details (Penny 1974), whilst in recent years the presence of small numbers has been noted there, suggesting that the species may breed on little-visited small islets near the lagoon entrance (AS & GR pers. obs.). It has been recorded as a vagrant to Bird, Aride, Cousin and La Digue (Skerrett *et al.* 2007).



Figure 1. Black-naped Tern *Sterna sumatrana* colony, Banc de Sable, Farquhar Atoll, Seychelles, 25 February 2006 (Adrian Skerrett)

Colonie de Sternes diamant *Sterna sumatrana*, Banc de Sable, Atoll Farquhar, Seychelles, 25 février 2006 (Adrian Skerrett)

St. François Atoll is an atoll with a land area of c.18 ha and a lagoon of c.5,700 ha. It lies close to Alphonse Atoll at the southern extremity of the Amirantes archipelago c.400 km south of Mahé, the main island of Seychelles. It is uninhabited, but on nearby Alphonse a small resort opened in 1999 and a conservation centre where the Island Conservation Society (ICS) has employed full-time staff since 2007. Black-naped Terns have been regularly observed for several years and breeding was suspected on St François Atoll. This has now been confirmed.

First breeding records of Black-naped Terns

On 26 February 2008, Wayne Haselau, a fly-fishing guide working for the Alphonse Island Resort, observed several pairs of Black-naped Terns roosting on a large sandbank c.1 km north of the island of St François. He noted some were displaying territorial behaviour. On closer inspection, he observed several further pairs of Black-naped Terns at rest, including an adult incubating an egg. The Alphonse Island Conservation Centre was informed of this discovery the same evening.

Six days later, Aubrey Rose and Pierre-André Adam (ICS) visited St François at 07.00 hrs to investigate. P-AA skirted the outer edge of the island, while AR walked across the reef flats to the

large sandbank where they presumed W. Haselau had made his observations. Ten active nests were found in a small coral rubble patch at the north end of the sandbank. Six nests contained a single egg and four had two eggs. The eggs were greenish blue with dark speckles. Another nest with two eggs was located on a sand bar, which has formed on the western side of St François within the last 5–6 years.

Earlier reports of Black-naped Terns

Désiré Gendron, manager of Alphonse in 1951–59, claimed in an interview with A. & J. Skerrett in 2000, shortly before his death, that *Dyanman* regularly bred on a sandbank off St François Island. This may have referred to Black-naped Terns but a firm identification is not possible as the Creole name *Dyanman* is applied to several species of tern, including Roseate Tern *Sterna dougallii* (Skerrett *et al.* 2003).

Since the establishment of the Alphonse Island Conservation Centre, the ICS has been eager to confirm St François Atoll as a breeding site for Black-naped Terns. In July 2007 recently fledged juveniles were sighted, which indicated that the species must be breeding somewhere close by. Fly-fishing guides working in the St François lagoon since 1999 believed that Black-naped Terns were nesting on shipwrecks at the southern edge of St

François Atoll reef. In February 2002, Wayne Haselau and Etienne Quilindo observed an adult tern with food in its bill entering the wreckage. Wayne Haselau also reported seeing chicks on the wreck. Nesting on shipwrecks has been recorded elsewhere in the world, including Australia (Kikkawa & Boles 1976, Walker 1986, Hulsman & Smith 1988), but has never been reported previously in Seychelles. ICS staff visited the wrecks and all of the sandbanks (exposed at high tide) around St François on 10 March 2008 and found no signs of nesting.

Regular monthly bird counts, commenced in February 2007, confirm that Black-naped Terns are present year-round. The following maxima have been recorded. Alphonse, 2 October 2007: 38 birds roosting on the sand flat at Pointe Dot; St François, 30 January 2008: 20 birds roosting on the sand bar opposite Pointe la Courte; Bijoutier, 20 April 2007: 26 birds; five pairs were observed copulating along the south beach. These figures suggest a minimum population size of 10–15 pairs for the Alphonse group, a figure borne out by the observations described here.

Population estimates for Seychelles and the Afrotropical region

Diamond & Prŷs-Jones (1986) summarise historical references to distribution and abundance in Seychelles, whilst the total Seychelles population has been estimated at 250–350 birds (Dodman 2002 *in* Wetlands International 2006). Recent discoveries at Farquhar Atoll, St Joseph Atoll and now St François Atoll indicate this estimate is almost certainly too low.

Based on current knowledge, we estimate the total Seychelles population as follows:

Aldabra	50–70 pairs	(Betts 2000)
Cosmoledo	30–50 pairs	(Skerrett <i>et al.</i> 2001, Rocamora <i>et al.</i> 2003)
Farquhar	20–40 pairs	(Skerrett 2006, Skerrett & Rocamora 2007)
St Joseph	10–20 pairs	(Skerrett & Skerrett 2005)
St François	10–15 pairs	(this paper)
African Banks	5–10 pairs	(C. Feare pers. comm. <i>in</i> Rocamora & Skerrett 2001)
Bancs du Sud	may breed	(Diamond & Prŷs-Jones 1986, Skerrett 1996)
Astove	may breed	(Penny 1974)
Total	Minimum 125–205 pairs (or 375–615 birds as per Wetlands International 2006)	

Seychelles hosts the only confirmed breeding sites in the Afrotropics for this species, but other colonies may exist. On Africa's east coast, small numbers of non-breeders have been occasionally recorded in Tanzania (e.g. nine birds at Latham Island in November 1987: Baker & Baker 2001) to Mozambique and KwaZulu-Natal, South Africa, to where the birds may have been driven by cyclones (Ginn *et al.* 1989, Ryan 1997). In addition, the following observations have been made on islands of the western Indian Ocean other than Seychelles. Îles Glorieuses: first observed by Abbott in 1893 (Ridgway 1895); no reports for more than a century until observed in small numbers in recent years by M. Le Corre (pers. comm.). Madagascar: one at Maroalika, Mahajanga province, on 4 February 1993 (Hawkins 1993); two at Baie d'Ambavatory on 23 January 2008 (G Rocamora & G. Jessy pers. obs.). Mayotte: photographed by F. Adriansen at L'Îlot du Sable Blanc, Mayotte, in November 1995 (Louette *et al.* 2004); up to 60 at offshore coralline islets in November 2003 (Rocamora 2004). Some of these sightings probably concern birds that breed in Seychelles, but undiscovered colonies may exist elsewhere. However, the regional population of this species numbers probably no more than 150–250 pairs (c.450–750 birds).

St François as an Important Bird Area (IBA)

St François Atoll was proposed as an IBA in the first inventory of Important Bird Areas presented to a national workshop in August 1998 (Rocamora & Skerrett 1998). Although the workshop accepted the proposal, the site was removed from the IBA list (Rocamora & Skerrett 2001), following concerns expressed by BirdLife Seychelles (now Nature Seychelles) that there were insufficient data to support inclusion.

Our estimate indicates that the IBA threshold of two birds is too low and, given that Seychelles holds most of the regional population, it might be raised to 4–7 birds. Even so, St François Atoll clearly meets the IBA criterion of international importance for the Black-naped Tern.

Regular counts have also confirmed that bird populations at St François consistently exceed IBA thresholds for Crab-plover *Dromas ardeola*, Ruddy Turnstone *Arenaria interpres* and Saunders's Tern *Sterna saundersi* (Skerrett 1996, 2001, Betts

2007). Finally, while numbers of Whimbrel *Numenius phaeopus* (600 birds) and Grey Plover *Pluvialis squatarola* (250 birds) are below the IBA thresholds, they are the largest recorded in Seychelles, further illustrating the importance of St François (Betts 2007). Therefore, St François Atoll meets IBA criteria for four species of congregatory waterbirds under IBA category A4i. In addition, the presence on neighbouring Alphonse Atoll of full-time conservation staff and an ecofriendly tourism operation makes St François relatively easily to protect and thus even more relevant as an IBA.

Other observations

This observation is just the latest discovery since ICS commenced surveys of bird populations in the outer islands. Other discoveries include the first confirmed breeding in the Alphonse group of Wedge-tailed Shearwater *Puffinus pacificus* and White-tailed Tropicbird *Phaethon lepturus*, whereas previously only Brown Noddy *Anous stolidus* and Fairy Tern *Gygis alba* were known to breed. Elsewhere, Black-naped Terns have also been confirmed as a breeding species on St Joseph Atoll (Skerrett & Skerrett 2005), where first reported in 2002 (Millett & Bristol 2002). The species has also been confirmed as a breeder on Farquhar, where newly fledged juveniles were first observed in 2004 (G. Rocamora & T. Cafrine pers. obs. in Skerrett & Rocamora 2007), nests with eggs were found in 2006 (Skerrett 2006) and nests with chicks in 2008 (C. & G. Savy pers. comm.). In addition, Roseate Terns have been discovered breeding on Goëlettes (Farquhar) for the first time since 1897 (Farquhar 1900, Skerrett & Rocamora 2007) and on St Joseph Atoll for the first time ever (Skerrett & Skerrett 2005).

Acknowledgements

We are grateful to the management and staff of Alphonse Island Fishing Company Limited, especially Wayne Haselau, and to Alphonse Island Conservation staff, especially Aubrey Rose, for support to confirm the observations on St François Atoll. Robert Prÿs-Jones and Roger Safford provided useful advice and some references during the preparation of this paper. We thank Mathieu Le Corre for supplying observations on Îles Glorieuses and Guy and Claudine Savy for the same on Farquhar.

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Received 27 May 2008; revision accepted 27 August 2008.